

REMARKS

Claims 1-13 are pending in the application. The Examiner has rejected all of the claims. Applicant respectfully seeks favorable reconsideration of the claims view of the following remarks.

The Examiner rejected independent claims 1 and 4 and dependent claims 2-3, 5 and 7-13 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,632,964 ("Ishii et al."). Applicants have cancelled claims 1-3 and 5-6. Applicants have also amended independent claim 4 to claim "conveying the exhaust gas into a first zone of a chamber...and conveying the exhaust gas into a second zone of the chamber." Support for the amendment to claim 4 is found on page 3, line 30 through page 4, line 1 and in original dependent claim 6. No new matter has been introduced. As acknowledged by the Examiner, Ishii et al. "does not teach an embodiment wherein the first and second treating steps occur in a single chamber sub-divided into two zones." *Office Action*, p. 3-4. Accordingly, Ishii et al. fails to disclose each and every element claimed in amended independent claim 4. Thus, amended claim 4 is not anticipated by Ishii et al. and Applicants respectfully request withdrawal of the rejection to claim 4.

In addition, dependent claims 7-13, which depend from amended independent claim 4, are similarly not anticipated by Ishii et al. for at least the reasons set forth above. Accordingly, Applicants respectfully request withdrawal of the rejections under § 102 of dependent claims 7-13.

The Examiner rejected dependent claim 6 under 35 U.S.C. § 103(a) as being obvious in view of the Ishii et al. either alone or in combination with U.S. Patent No. 6,749,819 ("Otsuka et al."). As mentioned above, Applicants have cancelled dependent claim 6 thereby obviating the Examiner's rejection of claim 6.

Applicants further submit that amended independent claim 4 and dependent claims 7-13 are not rendered obvious by Ishii et al. or Otsuka et al., either alone or in combination. Amended independent claim 4 claims "conveying the exhaust gas into a first zone of a chamber...and conveying the exhaust gas into a second zone of the chamber." As acknowledged by the Examiner, Ishii et al. "does not teach an embodiment wherein the first and second treating steps occur in a single chamber sub-divided into two zones." *Office Action*, p. 3-4. With respect to dependent claim 6 the Examiner asserted that "[i]t would have been obvious to modify the

process of Ishii et al. by combining the separate chambers into a single chamber having two portions...because making each treating agent integral to [a] single treatment chamber would be obvious...without any undue experimentation, particularly in light of the fact that benefits such as economy of scale could be recognized by doing so.” *Office Action*, p. 4 (citing *In re Larson*, 144 USPQ 347 (CCPA 1965)). Applicant respectfully submits that it would not have been obvious to modify the cleaning apparatus of Ishii et al. to provide the cleaning agent 4 and the ammonia decomposition catalyst 8 in a single chamber because Ishii et al. teach that the two materials are heated to incompatible temperatures. Col. 4, Ln 1-10, 51-53. The cleaning agent 4 is heated to 100°C or lower whereas the ammonia decomposition catalyst is heated to between 450°C and 1000°C. Col. 4, Ln 7-10, 51-53. Thus, carrying out these reactions in two separate zones of a single chamber would not be a simple integration of two reaction chambers requiring no undue experimentation as suggested by the Examiner. Accordingly, amended claim 4 is not rendered obvious by Ishii et al.

The Examiner further asserted that “[i]t would further be obvious in light of...Otsuka et al...which demonstrates by way of Figures 2 (A) and (B) that one of ordinary skill...would recognize each physical arrangement[] as a known and obvious variant of the other.” *Office Action*, p. 4. Figure 2(B) of Otsuka et al. illustrates a chamber surrounded by a *single* heater. As mentioned above, Ishii et al. teach that the cleaning agent 4 is heated to 100°C or lower whereas the ammonia decomposition catalyst is heated to between 450°C and 1000°C. Col. 4, Ln 7-10, 51-53. It is unclear if or how the apparatus of Otsuka et al. shown in Figure 2(B) could even perform the method of Ishii et al. Indeed, it appears that *none* of the 38 Examples of Otsuka et al. describe a process carried out in the apparatus of Figure 2(B), but rather in an apparatus having separate chambers like those of Figures 2(A) and 3. Thus, Applicant respectfully submits that Otsuka et al. teaches away from Ishii et al. because the apparatus of Figure 2(B) of Otsuka et al. could not perform the process of Ishii et al. Accordingly, independent claim 4 is not rendered obvious by Ishii et al. either alone or in combination with Otsuka et al.

In addition, dependent claims 7-13, which depend from amended independent claim 4, are similarly not rendered obvious by Ishii et al. either alone or in combination with Otsuka et al. for at least the reasons set forth above.

In view of the foregoing remarks, Applicant respectfully submits that amended independent claim 4 and dependent claims 7-13 are neither anticipated nor are not rendered

obvious Ishii et al. either alone or in combination with Otsuka et al. Accordingly, Applicant respectfully requests withdrawal of the rejections to these claims and that the application be promptly passed to issue.

Respectfully submitted,



Ira Lee Zebrak

Registration No. 31,147

Attorney for Applicant(s)

Date:

*October 20, 2006*

The BOC Group, Inc.  
575 Mountain Avenue  
Murray Hill, NJ 07974  
Phone: 908-771-6469  
Fax: 908-771-6159

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